Outer Space Liability: Past, Present and Future*

I. Past Outer Space Liability

Due to the excellent efforts of the Committee on Peaceful Uses of Outer Space of the United Nations in 1969, 1970, 1971 and 1972,[1] there came into being in 1972 the Convention On International Liability for Damage Caused by Space Objects (hereinafter referred to as the 1972 Liability Convention).[2] The Treaty has been signed by seventy-three countries and, subsequently, was ratified by thirty-one with eleven accessions. However, it has never been signed by the People's Republic of China. This Treaty expressly excludes space liability damages to nationals of the launching State. Citizens or nationals of the launching State must make their own claims against their own governments under the laws of their own countries.

II. Present Outer Space Liability

Because of the fall of the USSR's *Cosmos* 954 on Canadian territory on January 24, 1978, comprising debris from a nuclear-powered ocean surveillance spacecraft, a claim for damages, including search and recovery costs, was filed under the 1972 Liability Convention by Canada against the USSR. The first Canadian claims exceeded $6 million, and the final claims are estimated at some $12 million. The Canadian claims also invoked article 7 of the 1967 Outer Space Treaty[3]; and article 5, paragraphs 2 and 5 of the 1968 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched Into Outer Space.[4]

As of the winter of 1980, the Soviet Union is still considering this Canadian claim and the matter may go to a Claims Commission under the 1972 Liability Convention. The award of such a Claims Commission will only be recommendatory, not mandatory. Although it will not be binding, in the event the Commission rules in Canada's favor its decision will evoke very considerable public opinion and pressure throughout the world in support of the payment of the Canadian claim for damages.

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[1] *See* E. R. Finch, SPACE LIABILITY AND WORLD SPACE, XVI Conference of InterAmerican Bar Association (Nov. 1-8, 1969 in Caracas, Venezuala).

[2] 24 U.S.T. 2389, T.I.A.S. No. 7762.

[3] 18 U.S.T. 2410, T.I.A.S. 6347.

[4] 19 U.S.T. 7570, T.I.A.S. No. 6599. *See also* Finch & Moore, *The Cosmos 954 Incident and International Space Law*, 65 A.B.A.J. 56 (1979); Dembling, *Cosmos 954: Issues of Law and Policy* 6 J. SPACE L. 129 (1978).

Further, in July, 1979, the United States' *Skylab,* with a weight of some 79 tons, fell from orbit and impacted the oceans and the earth. Much of it broke apart in the atmosphere and burned up, but many pieces landed in Australia and the Indian Ocean on or about July 3, 1979. The Skylab Project Director and North American Air Defense Command estimated that *Skylab* would fall to earth or in the ocean in a footprint pattern of about 500 pieces, one or more pieces every ten miles, possibly covering some 400,000 square miles. More than half the pieces would weigh less than ten pounds; ten pieces, however would weigh over 1,000 pounds each and two would weigh approximately 4,000 pounds each. The latter would comprise the 5,000 pound metal collar joining the two main sections of *Skylab,* and the 4,000 pound lead vault for storing film therein. The United States Defense Department had five emergency damage assessment teams and medical teams stationed in different parts of the world with C-141 transport planes ready in the event a foreign government asked for emergency help (which did *not* occur). The United States had some technical ability remaining to tilt *Skylab*'s position in orbit.

If any part of *Skylab* had fallen in the United States, a citizen of the United States would have had three legal choices in pursuing his damages liability claim. First, he could proceed under the Federal Tort Claims Act as amended wherein the United States Government has given its consent to be sued.[5] However, the claimant has the burden of proving fault, that is "a negligent or wrongful act." Further, the claimant might fail if the negligence was deemed to have been exercised in a discretionary function of the United States employee who committed the act of negligence.[6] There is considerable case law on the "discretionary function" defense.

Second, the United States claimant could proceed under the NASA Act which allows a court:

> to consider, ascertain, adjust, determine, settle, and pay, on behalf of the United States, in full satisfaction thereof, any claim for $5,000 or less against the United States for bodily injury, death, or damage to or loss of real or personal property resulting from the conduct of the Administration's functions as specified in subsection (a) of this section, where such claim is presented to the Administration in writing within two years after the accident or incident out of which the claim arises. . . .[7]

Under this act, claims for physical damage, personal injury or death may be submitted to NASA for special administrative determination and settlement by NASA where the injuries have arisen from the "conduct of the Administration's function." Administrative recovery is, however, limited to $5,000. If damages exceed $5,000, NASA may submit the greater claim to the United States Congress for consideration if it considers it meritorious. Thus

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[5] 28 U.S.C. § 1346(b) (1976).
[6] 28 U.S.C. § 2680(a) (1976).
[7] 42 U.S.C. § 2473(c)(13)(A) (1976).

it is provided that "if the Administration considers a claim in excess of $5,000 is meritorious and would otherwise be covered by this paragraph, to report the facts and circumstances thereof to the Congress for its consideration. . . ."[8] Again, a claimant has the burden if injury was caused by the conduct of the United States space program. In addition, the claim must be made within two years. The procedure for meeting the claim is spelled out in 14 C.F.R. 1204.900–915. These administrative procedures are independent of the claims procedures noted above under the Federal Tort Claims Act. Failure of a claimant to designate which procedure he is using allows NASA to treat the matter under either one. A 1978 amendment to the Federal Tort Claims Act raised the above monetary legal limits to $25,000.[9]

Third, a claimant might proceed through the United States Congress for his damages by a private bill. However, the United States Congress, in considering a private bill application introduced by a member of Congress would undoubtedly first seek General Accounting Office approval and then require very complete and strict documentation and proof.

With respect to the monetary limit in the NASA Act, there is legislation pending before the United States Senate which would increase the $5,000 limit applicable to NASA to $25,000. This legislation, attached to the 1979 NASA Appropriations Act, has already been passed by the House of Representatives. By its terms, it would not become effective before October 1, 1979, so the increase would not be applicable to *Skylab* damages. Further, a new section on "Insurance and Indemnification"[10] has been proposed where advance private insurance applies as well as United States government insurance and indemnification. This may arise out of damages coming from portions of the Space Shuttle which impact the earth. All this seems both desirable and foresighted on the part of NASA and the United States. It gives the NASA Administrator broad discretion, both as to national and international claims where private industry insurance or United States government indemnity, or both, are applicable. This is obtained in advance of launching by a user's written agreement with private insurers and NASA. If the new section 308(a) of the NASA Act is passed by the United States Congress, there may also be public hearings on the NASA Regulations proposed thereunder.

Turning to the pieces of *Skylab* striking Australia or people and causing provable damages, the United States would have been strictly liable as the launching State under the 1972 Liability Convention discussed above. No meritorious claims for actual damages to people or property by *Skylab* were known to be filed up to one month thereafter.

The 1972 Liability Convention provides that: "A launching State shall be absolutely liable to pay compensation for damage caused by its space object

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[8] *Id.* at § 2473(c)(13)(B).
[9] 28 U.S.C. § 2672.
[10] Sec. 308(a) 1979 NASA Act, Pub. L. 96-48, Oct. 1, 1979.

on the surface of the earth or to aircraft in flight."[11] This is an outgrowth and implementation of the primary damage provision of the 1967 Outer Space Treaty.[12] It must be emphasized that the 1972 Liability Convention, which provides for claims to be filed through diplomatic channels within one year of damage, does not result in mandatory awards but only recommendatory awards. There is a consensus among international outer space attorneys that damages must be limited to those actually suffered by persons and property, and does not include punitive or indirect damages. Actual damage costs should certainly be recoverable from the launching State.

III. Future Outer Space Liability

Learned professionals in outer space law and science did not see an unmanageable situation from the impact of *Skylab*. There are some sixty-five legal specialists in international law, science and technology, and they are well aware of the existing laws and procedures. The national or international damage claims, if any, should therefore be handled in an orderly manner.

There is some feeling among aerospace attorneys that the 1972 Liability Convention should be amended in accordance with article 25 of the Convention which states:

> Any State Party to this Convention may propose amendments to this Convention. Amendments shall enter into force for each State Party to the Convention accepting the amendments upon their acceptance by a majority of the States Parties to the Convention and thereafter for each remaining State Party to the Convention on the date of acceptance by it.

The proposed amendment would make the damages award by the Claims Commission established by the terms of the 1972 Liability Convention binding rather than merely recommendatory. It is this writer's opinion that this will be exceedingly difficult for two reasons: States which are parties to the 1972 Liability Convention on outer space jealously guard their sovereignty and there is no maximum monetary liability stated in the 1972 Liability Convention. This subject was more than adequately explored over a period of several years in the Committee on Peaceful Uses of Outer Space in the United Nations prior to the enactment of the present 1972 Liability Convention. I think it would be only a futile academic exercise to raise it again now by amendment.

Finally, as to the future, the enactment of new section 308(a) on insurance and indemnification as part of the NASA Act would be a definite step forward and would help the already considerable participation in outer space matters by the private insurance industry to further expand over the years. Undoubtedly, NASA will hold public hearings and ultimately promulgate new regulations administratively implementing new section 308(a) of the

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[11] 1972 Liability Convention, *supra* note 2, art. 2. *See also* Christol, 74 A.J.I.L. 2, 364 (1980).
[12] 18 U.S.T. 2410, T.I.A.S. 6437, art. VII.

NASA Act when it becomes law. Any changes were not applicable to *Skylab* but will cover future outer space liability incidents which might arise in the United States with the coming extensive operations of the United States Shuttle and the outer space operations of other nations and international organizations.

As of May 20, 1979, there were 1,032 outer space payloads in orbit, plus 3,481 pieces of outer space debris. The United States had 409 of the outer space payloads in orbit; the Soviet Union had 529 of the outer space payloads in orbit; and the balance were attributable to France, NATO, India, China, and others. Neither NASA nor the North American Air Defense Command are aware of any report of any person being hit as of May 20, 1979 by space debris.

We have seen continued discussions of outer space liability issues at meetings held in Munich on September 13 and 14, 1979 in conjunction with an international colloquium on the "Settlement of Space Law Disputes." Such discussions also occurred at the Twenty-First International Institute of Space Law Colloquium on the law of outer space during the meeting of the Thirtieth International Astronautical Federation in Munich from September 17–22, 1979; and they will no doubt occur in a full conference on outer space to be held in 1982 under the auspices of the United Nations. Outer space is *the* key to world peace. As the world remembered the tenth anniversary of the United States moon walk on July 20, 1979, it is an appropriate time for outer space professionals in law and science to rededicate themselves to the peaceful use of outer space for the further benefit of all mankind, with particular emphasis for the future on manufacturing and supplying from outer space pollution-free energy for earth. These activities will raise future problems in space liability. For the time being, law and science have marched forward together. They should continue to do so.

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